Appln. No. 09/677,072
Amdt. dated: September 2, 2005
Reply to Office Action dated June 6, 2005

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims

1.   (Canceled)

2.   (Currently amended) A distributed messaging method for publishing topical data messages in a communications network comprising:

receiving in a first message router from a data consumer a request to subscribe to a message topic;

responsive to receiving said subscription request, retrieving from a message topic server a location of a second message router communicatively linked to a data publisher able to provide data messages consonant with said requested message topic;

sharing state memory among at least said message topic server, said first message router and said second message router to store both message traffic data and network configuration data;

establishing an interprocess communications connection between said first and second message routers;

responsive to a communication fault in at least one of said first message router, said second message router, said data consumer, and said message server, re-synchronizing said interprocess communications connection from said shared state memory;

transmitting data messages from said data publisher over said ~~re-synchronized~~ interprocess communications ~~link~~ connection, to said data consumer, after said interprocess communication connection has been resynchronized.

3.   (Original) The method of claim 2, wherein said step of establishing an interprocess communications connection comprises establishing a multicast data communications link between said first and second message routers.

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4.   (Original) The method of claim 3, wherein said transmitting step comprises multicasting data messages from said data publisher over said multicast data communications link to said data consumer.

5.   (Original) The method of claim 2, further comprising:

detecting a communications interruption;

responsive to detecting said interruption, terminating said subscription, retrieving from said message topic server a location of a message router communicatively linked to a data publisher able to resume said providing of said data messages consonant with said requested message topic, establishing an interprocess communications connection between said first message router and said message router communicatively linked to a data publisher able to resume said providing of said data messages, and resuming said transmission of said data messages from said data publisher over said established interprocess communications connection between said first message router and said message router communicatively linked to a data publisher able to resume said providing of said data messages.

6.   (Original) The method of claim 5, wherein said detecting step comprises:

detecting a communications break between said data publisher and said second router.

7.   (Original) The method of claim 5, wherein said detecting step comprises:

detecting a communications break between said first and second routers.

8.   (Original) The method of claim 5, wherein said detecting step comprises:

detecting said data publisher terminating publication of said requested message topic.

9.   (Original) The method of claim 5, wherein said step of establishing an interprocess communications connection between said first message router and said message router communicatively linked to a data publisher able to resume said

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providing of said data messages comprises re-establishing an interprocess communications connection between said first and second message routers.

10.　(Currently amended) A machine readable storage, having stored thereon a computer program for publishing topical data messages in a communications network, said computer program having a plurality of code sections executable by a machine for causing the machine to perform the steps of:

receiving in a first message router from a data consumer a request to subscribe to a message topic;

responsive to receiving said subscription request, retrieving from a message topic server a location of a second message router communicatively linked to a data publisher able to provide data messages consonant with said requested message topic;

sharing state memory among at least said message topic server, said first message router and said second message router to store both message traffic data and network configuration data;

establishing an interprocess communications connection between said first and second message routers;

responsive to a communication fault in at least one of said first message router, said second message router, said data consumer, and said message server, re-synchronizing said interprocess communications connection from said shared state memory;

transmitting data messages from said data publisher over said ~~re-synchronized~~ interprocess communications ~~link~~ connection, to said data consumer, after said interprocess communication connection has been re-synchronized.

11.　(Original) The machine readable storage of claim 10, wherein said step of establishing an interprocess communications connection comprises establishing a multicast data communications link between said first and second message routers.

12.　(Original) The machine readable storage of claim 11, wherein said transmitting step comprises multicasting data messages from said data publisher over said multicast data communications link to said data consumer.

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13. (Original) The machine readable storage of claim 10, further comprising:

detecting a communications interruption;

responsive to detecting said interruption, terminating said subscription, retrieving from said message topic server a location of a message router communicatively linked to a data publisher able to resume said providing of said data messages consonant with said requested message topic, establishing an interprocess communications connection between said first message router and said message router communicatively linked to a data publisher able to resume said providing of said data messages, and resuming said transmission of said data messages from said data publisher over said established interprocess communications connection between said first message router and said message router communicatively linked to a data publisher able to resume said providing of said data messages.

14. (Original) The machine readable storage of claim 13, wherein said detecting step comprises:

detecting a communications break between said data publisher and said second router.

15. (Original) The machine readable storage of claim 13, wherein said detecting step comprises:

detecting a communications break between said first and second routers.

16. (Original) The machine readable storage of claim 13, wherein said detecting step comprises:

detecting said data publisher terminating publication of said requested message topic.

17. (Original) The machine readable storage of claim 13, wherein said step of establishing an interprocess communications connection between said first message router and said message router communicatively linked to a data publisher able to resume said providing of said data messages comprises re-establishing an interprocess communications connection between said first and second message routers.

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18.   (Currently amended) A distributed messaging system for transmitting topical
data messages from data publishers to data consumers comprising:

      a message topic server;

      a first message router;

      a second message router;

      a data consumer communicatively linked with said first message router;

      a data publisher communicatively linked with said second message router;

      said first message router receiving from said data consumer a request to
subscribe to a message topic and, responsive to receiving said subscription request,
retrieving from said message topic server a location of said second message router;

      wherein state memory is shared among at least said message topic server, said
first message router and said second message router to store both message traffic data
and network configuration data, an interprocess communications connection is
established between said first message router and said second message router, data
messages are transmitted from said data publisher over said ~~established~~ interprocess
communications ~~link~~ connection to said data consumer, and responsive to a
communication fault in at least one of said first message router, said second message
router, said data consumer, and said message server, said interprocess
communications connection is re-synchronized from said shared state memory.

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